Daniel Hood

5/20/04-03577

May 20, 2004

TO: Randy McElveen

FROM: David Lilley

RE: Comments on the Human Health Risk Assessment portions of the Draft SWMU 43 RCRA Facility Investigation Report, MCB Camp Lejeune January, 2004

1. Appendix J, Table 2.5: The NC Groundwater Quality Standards (2L) should be added for heptachlor epoxide, alpha-chlordane, gamma-chlordane, arsenic, barium, chromium, lead, mercury, and selenium.

2. Appendix J, Table 5.1: The reference doses provided by IRIS are chronic, not subchronic. Please correct.

3. On page 6-33, it is pointed out that DENR recommended using the experimentally-derived oral absorption efficiencies obtained from Oak Ridge National Laboratory. This recommendation predates information in Exhibit 4-1 in the latest version of RAGS Part E (2003). In the future, please use the oral absorption efficiencies presented in RAGS Part E.

4. Page 6-12, third paragraph: While I agree with the logic of using the surface soil data set consisting of only those surface soil samples collected outside the fence for the current exposure scenario, there is the potential for the fence to be breached or removed in the future, making the soil inside the fence available to trespassers. The future trespasser exposure to surface soil inside the fence should be quantitatively evaluated in this risk assessment.

5. Page 6-31, PEF equation: The constant 556 does not appear in the cited reference. Where did it come from?

6. Page 6-31: A road length of 76 m and a road width of 15.24 m equals a road area of 1,158 m^2, not 5,829.96 m^2. Please correct.

7. Page 6-31: Since construction activities normally run 8 hours a day, T = 250 days x 8 hours/day x 3,600 seconds/hour = 7,200,000 seconds. Please correct.

8. Page 6-31: During construction activities, dump trucks and vehicles carrying construction materials would need to access the site and would not always be able to stay on existing streets and asphalt parking lots. Access by one car and one truck per day is an unrealistically low estimate of vehicle activity during construction. In the example given in the cited reference, 30 vehicles/day was used as an estimate on a 5 acre site. The number of vehicles/day estimated on this site should be somewhere between EPA's example and the number in this risk assessment. Please correct.

9. Page 6-31: In the cited reference, EPA also provides guidance for PEF adjustment due to "Wind Erosion and Other Construction Activities". These calculations should be added to this risk assessment.

10. Appendix I: For organics, the derivation of DAD for water contact must include the calculation of DA_{event}, as described on page 3-4 of the 2003 version of RAGS Part E. Please incorporate this into the risk assessment.

DL/dl/HumanHealthRA1/22,23

May 21, 2004

TO: Randy McElveen

FROM: David Lilley

RE: Comments on the Ecological Risk Assessment portions of the Draft SWMU 43 RCRA Facility Investigation Report, MCB Camp Lejeune January, 2004

1. Page 7-14: The mistake in the 2002 NCDENR SLERA guidance that recommends the use of one half the maximum SQL as a proxy concentration for non-detects was pointed out and corrected in my June 18, 2003 comments on the Draft Master Project Plans for the RCRA projects. When comparing non-detects to screening values, the maximum detection limit should be used as the proxy concentration. Please correct.

   Please note: The 2002 NCDENR SLERA guidance has been updated an is available at http://www.wastenotnc.org/SFHOME/SLERA.HTM.

2. Tables 7-3 and 7-4: The NC DENR guidance mentioned in comment 1 provides screening values consistent with US EPA Region 4 screening values. Please use the values provided in this guidance in this risk assessment.

3. Page 7-27: The elimination of COPCs based on low frequency of detection (< 5%) is based on outdated human health guidance and should not be used in ecological risk assessments. Please correct.

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